

### Remarks

Reconsideration and withdrawal of the rejection of the claims, in view of the amendments and remarks herein, is respectfully requested. Claims 1-16, 20-27, and 29-30 are canceled. Claim 28 is amended. The amendments to claim 28 are intended to advance the application and is not intended to concede to the correctness of the Examiner's position or to prejudice the prosecution of the claims prior to amendment, which claims are present in an application related to the above-identified application. Claims 17-19, 28 and 32-40 are now pending in this application.

Support for the amendments to claim 28 are found in originally-filed claim 28, and at page 3, line 30-page 4, line 13 and in Example 2 in the specification.

Claims 1-16, 20-27 and 29-30 are canceled solely in response to the Restriction Requirement and without prejudice to their presentation in an appropriately filed divisional application.

The Examiner rejected claims 28 and 32-40 under 35 U.S.C. § 103(a) as being unpatentable over Rock et al. (Proc. Natl. Acad. Sci. USA, 95:588 (1998)) in view of Morris et al. (Innovations, 3:1 (1995)). This rejection is respectfully traversed.

Rock et al. disclose the cloning of five human Toll-like receptor (TLR) genes. Rock et al. used PCR primers derived from a Toll-like human sequence identified in GenBank to probe a cDNA library to yield a TLR1 cDNA (page 589). It is disclosed that the TLR2-4 genes were cloned by DNA hybridization, and TLR5 is a partial EST sequence (page 589).

Morris et al. teach oligo d(T) primers with linkers containing a restriction endonuclease recognition site, or directional random primers with the linkers, for directional cloning (Figure 1).

The Examiner asserts that Rock et al. teach the molecular cloning of five TLR genes, including the TLR4 gene, with nucleic acid primers and that the Morris reference teaches the use of random primers with restriction sites, and so concludes that it would have been obvious to one of skill in the art to practice a method of detecting polymorphisms in human TLR4 through amplification of the nucleic acid with probes comprising restriction sites. However, neither reference discloses or suggests polymorphisms in TLR4 DNA at positions corresponding to

residue 299 or 399 of TLR4 or the use of an oligonucleotide with at least two nucleotide substitutions that is useful to detect those polymorphisms. Nor is there any motivation in Rock et al. or the Morris reference to detect polymorphisms in the TLR4 gene, much less to detect a polymorphism in codons encoding residue 299 or 399 of TLR4.

The Examiner also asserts that the claims recite an amplification step but not a comparing or determining step. The Examiner is respectfully directed to line 2 of claim 28 which recites "determining".

Therefore, withdrawal of the § 103 rejection is appropriate and is respectfully requested.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6959 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

DAVID A. SCHWARTZ ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
P.O. Box 2938  
Minneapolis, MN 55402  
(612) 373-6959

Date

August 5, 2005

By

Janet E. Embretson  
Reg. No. 39,665

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 8 day of August, 2005.

CANDIS BUENDING

Name

Quade B. Bready  
Signature